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# United States Patent [19]

# Gilhousen et al.

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# [54] REVERSE LINK, CLOSED LOOP POWER CONTROL IN A CODE DIVISION MULTIPLE ACCESS SYSTEM

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[\*] Notice: The term of this patent shall not extend

beyond the expiration date of Pat. No.

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## Related U.S. Application Data

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[51] Int. Cl.<sup>6</sup> ...... H04B 7/00

[52] **U.S. Cl.** ...... **455/69**; 455/522; 455/561; 455/517

524, 343, 226.1, 226.2, 226.3, 100, 574, 67.1, 117; 370/318, 310, 320; 375/200,

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## [57] ABSTRACT

The process of the present invention enables a mobile radiotelephone to operate at a 100% duty cycle while providing closed loop power control. The base station measures the signal to noise ratio of the signal from the mobile and compares that SNR with the SNR threshold values the base station has for each data rate the mobile is capable of transmitting. The base station then generates power control commands to instruct the mobile to change its power depending on the outcome of the comparisons.

#### 10 Claims, 3 Drawing Sheets

